

-1/12

Figure 1

MNTPLFRLSLLSLTLAAGFAHAAENNAKVVLDTVTVKGDRQGSK
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 KNWGVRLNSGFASNEGVSYGASVFGKEGNFDGLFSYNRNDEKDYEAGKGFRNVNGGKT
 VPYSALDKRSYLAKIGTTFGDDDHRIVLSHMKDQHRGIRTVREEFTVGDKSSRINIDR
 QAPAYRETTQSNTNLAYTGKNLGFVEKLDANAYVLEKERYSADDSGTGYAGNVKGPNH
 TRITTRGANFNFD SRLAEQTLKYGINYRHQEI KPQAF LNSKFSIPTTEEKNGQKVDK
 PMEQQMKDRADEDTVHAYKLSNPTKTD TGVYVEAIHDI GDFTLTGGLRYDRFKVKTHD
 GKT VSSSNLNP SFGVIWQPHEHWSFSASHNYASRSPRLYDALQTHGKRGII SIADGTK
 AERARNT EIGFN YNDGTFAANGSYFWQTIKDALANPQNRHDSVAVREAVNAGYIKNHG
 YELGASYRTGGLTAKVGVSHSKPRFYDTHKDKLLSANPEFGAQVGRTWTASLAYRFQN
 PNLEIGWRGRYVQKATGSILAAGQKDRKGNLENVVRKGFVNDVFANWKPLGKDTLNV
 NLSVNNVFNKFYYPHSQRWTNTLPGVGRDVRLGVNYKF

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Figure 2

MNAPFFRLSLLSLTLAAGFAHAAENNANVALDVTVTVGDRQGSK
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cgattcccta	aggtgctgaa					

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Figure 3

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 VFGKEGNFDGLFSYNRNDEKDYEAGKGFRNVTGGKTVPYALSALDKRSYLAKIGTSFGGD
 DHRIVLSHMKDQHRGIRTVGEEFTVTNNSRLDLDRQAPAYRETTQSNNTNLAYTGKDLG
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 RFYDTHPKLLSANPEFGAQVGRWTASLAYRFQNP NLEIGWRGRYVQKAVGSILVAG
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 PDVGRDVR LGVNYKF

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ggggcgatta	tcgtcaaaac	cgtcgatggc	caagacctgc	tcaaaggcct	ggataaaaaac	421
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ctggatgcca	acgcctatgt	gttggaaaaag	aaacgctatt	ccgccgatga	caaagataac	901
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catcccgaaa aaatgccgtc tgaaagcctt tcagacgg

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Figure 4

AENNAKVVLDTVTVKGDROGSKIRTNIVTLQQKDESTATDMREL
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 HNYASRSPRLYDALQTHGKRGII SIADGTKAERARNT EIGFNYNDGTFAANGSYFWQT
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 HKDKLLSANPEFGAQVGRWTWASLAYRFQNP NLEIGWRGRYVQKAVGSILVAGQKDRN
 GKLENVVRKGFVNDI FANWKPLGKDTLNVNLSVNNVFNTFYYPHSQRWTNTLPDVG
 R DVRLGVNYKF

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Reference molecule:	FA1				Homology
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Sequence 3:	2996	1 - 697	(697 aa)		91%
Sequence 4:	H44/76	1 - 698	(698 aa)		92%

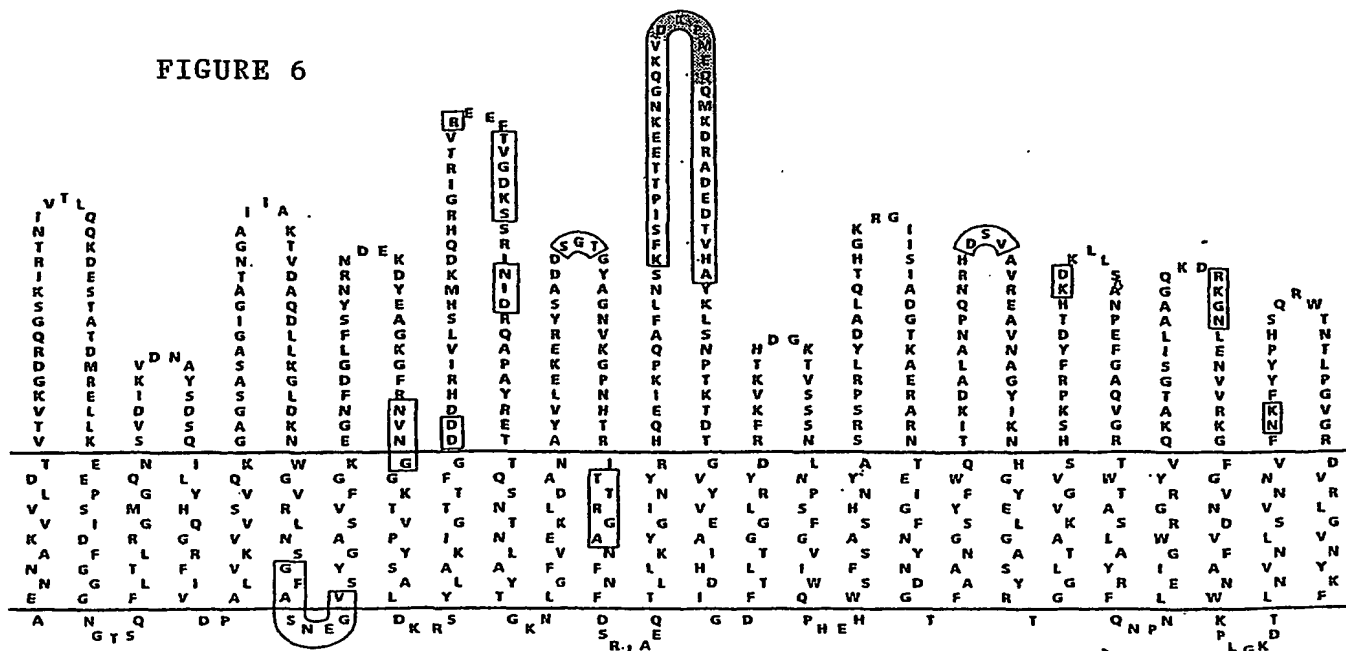
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AENXNAXWALDVTYVKGDPPQSGKIRTNVTLQKDESTATDMRELLKEEPSIDFGGNGTSGQFLTLEGWQ
.K.V.....
.K.....
.K.V.....
NSVDIKVDNAYSDSQILYEQGRFIVDPALVKVVSQKGAGCSASAGIGATNGAIATKDAQDLLKGLON
.....V.....G.....
WCVRLNSGFACNNGASYGASVFGKEGRFDGLPSYNRNDEKDYEAGKGFRND-NGGKTPVSALDKRSYLA
.PSDS.E.V.....N.....NF.....
.S.E.V.....V-T.....
.S.E.V.....V.....
XIGTTFGGGDHRIVLSHMKDQHRGIRTVREEFAVSEKSNRITIKROAPSRYETTSQSNINLAYTKDGLCV
.....T.GA.D.....N.....V.A.....N.....
.S.GD.....G.T.TN.....LDD.....A.....
D.....T.GD.S.ND.....A.....
EXLDANAYVLEKXYSADDKKNYAGVKGDNTRIATSRYSNFDLSAQTLLKYGINVYHQBKPOA
.S.....SGT.....T.GA.....
E.....SGT.....T.GA.....
FLNSEFEIKDKKAKATNEEK.....-KN.....-RENEKIAKAYRLTNPTKTDTGAYTAEIHE
.Q.K.E.....D.N.....A.....
.K.S.PTT.....KNGODVA.....PADQQAQK.DD.ALWHS.....
.K.S.....P.T.....NQKVKDEHEQMD.....AD.QTVR.....K.S.....V.V.....D
IDGFTLTOGLRYDRFKVKTHDGKTVSSSSLNPSFGVIMQPREHVSFSPASINUYAGRSPLDYALQTHKRG
.....N.....H.....S.....
.GD.....N.....H.....S.....
IISIDAGTKAERARNTIEIGFYHMDGTPAANGSYFRTIIDKALANPQNRKDSVAREANAGYIKHGYEL
.....N.....V.....
.G.....E.....R.W.....V.A.....
GASYRTGGLTAKVGVSHSKPRFYDTHDKLLSANPEFGAQVGRITASLAYRFKYNLEIGWBGRYVQKA
.....N.....Q.....
.....PK.....Q.....
VGSILAAQCKDRDGLKNVVRQGVNDVFANWPKLGKDTLMNVLSVMNVFDFKYYPHSQRWNTILPGCV
.V.....N.....K.....I.....N.....
.V.....N.....K.....H.....N.....D.....
.T.....K.N.....K.....N.....
RDVRLGVNYXF
.....
.....

```

FIGURE 5

FIGURE 6



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FIGURE 7

Reference molecule:	H44/76	1 - 105	(105 aa)	Homology
Sequence 2:	2996	1 - 105	(105 aa)	83%
Sequence 3:	870446	1 - 105	(105 aa)	83%
Sequence 4:	892257	1 - 98	(98 aa)	70%
Sequence 5:	M990	1 - 98	(98 aa)	76%
Sequence 6:	870227	1 - 108	(108 aa)	73%
Sequence 7:	S3446	1 - 108	(108 aa)	73%
Sequence 8:	M982	1 - 108	(108 aa)	70%

H44/76	PNHTRITTRGANFNFDRLAEQTLKYGINYRQEIKPQAFINSKFSIP-	(49)
2996	.....M.....	(49)
870446	.....M.....	(49)
892257	.....Q.K.ED	(50)
M990	.....Q.K.-	(48)
870227	.....GE.-	(46)
S3446	.....GE.-	(46)
M982	.....GE.K.S-	(49)
H44/76	----TTEKNGQKV---D-----KPMEQQMKDRADEDTVHAYKLSN	(83)
2996	----K....D---A-----AD..A...K..AL..S.R.T.	(83)
870446	----K....D---A-----AD..A...K..AL..S.R.T.	(83)
892257	KEKA.D.....N.EN.KIAK..R.T.	(76)
M990	----D.T.....A-----T.A.I..N....A.A.D....	(76)
870227	----IS.K.K---PKDPRKEID.TD.EKA..KK.M.L..S.....	(85)
S3446	----IS.K.K---PKDPRKEID.TA.EKA..KK.M.L..S.....	(85)
M982	----DKKPNPANPKKEI-----DAAEKE..KK.YAL..S.....	(85)
H44/76	PTKIDTGVYVEAIHDIQDFTLT	(105)
2996	.....A.I....E.NG....	(105)
870446	.....A.I....E.NG....	(105)
892257A.A.I....E.DG....	(98)
M990A.I.T..E..G....	(98)
870227A.I.T..E..G....	(108)
S3446A.I.T..E.DG....	(108)
M982	.A....A.I.T.....	(108)

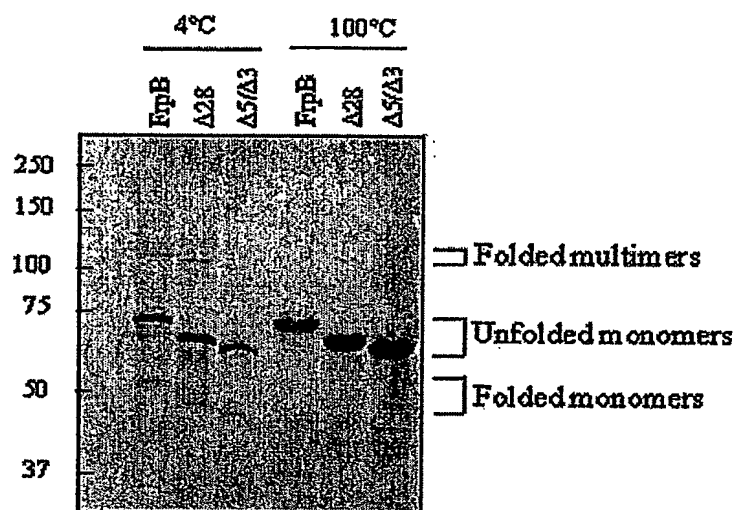
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Figure 8

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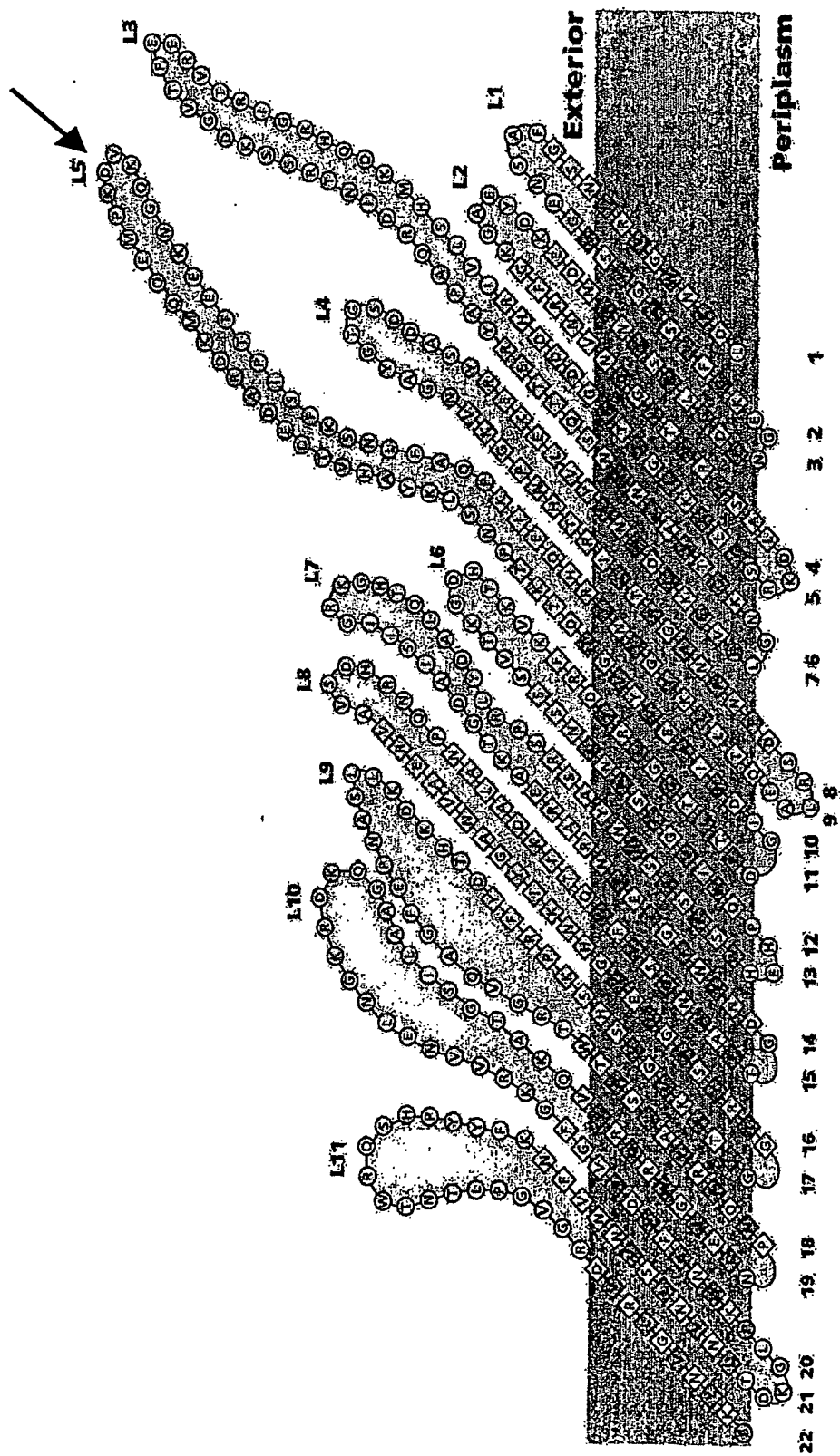


Figure 9

Figure 10A

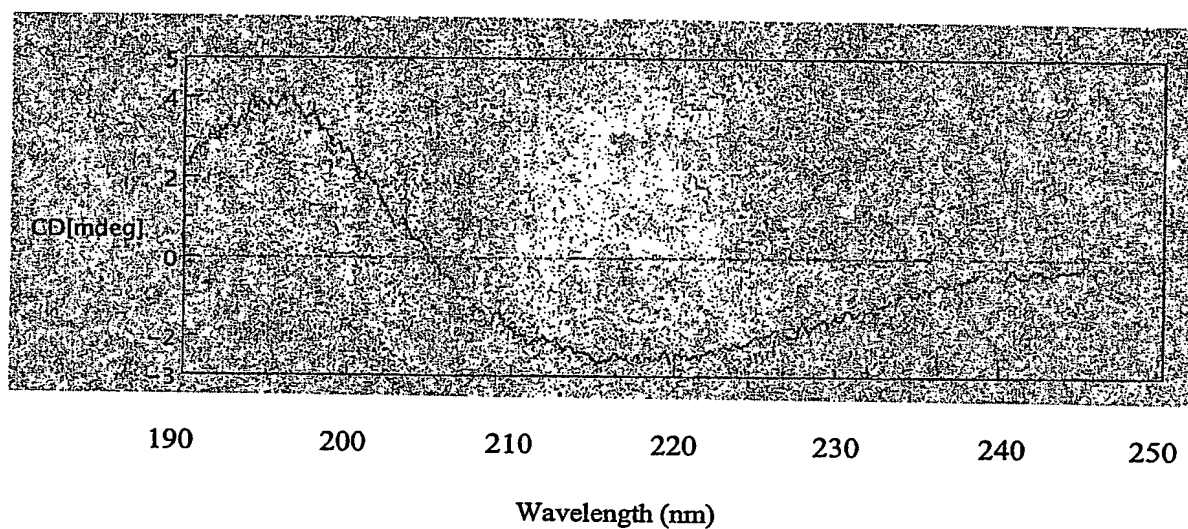
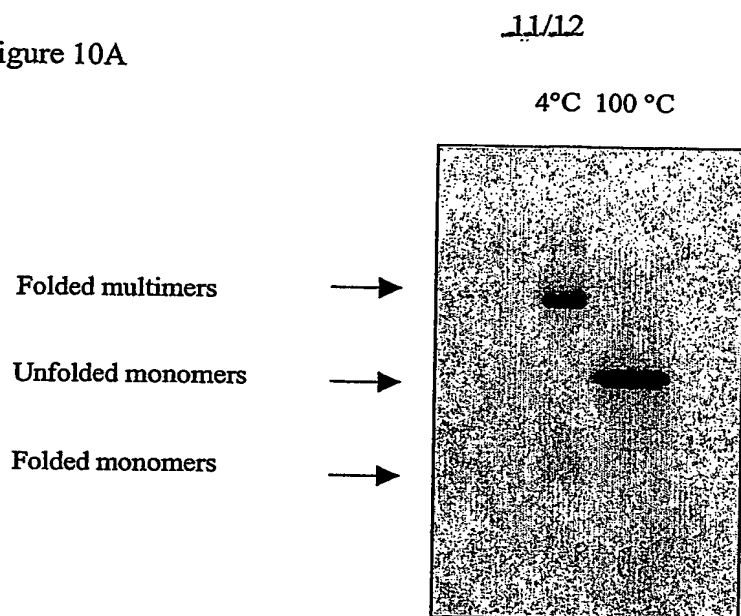


Figure 10B

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Figure 11

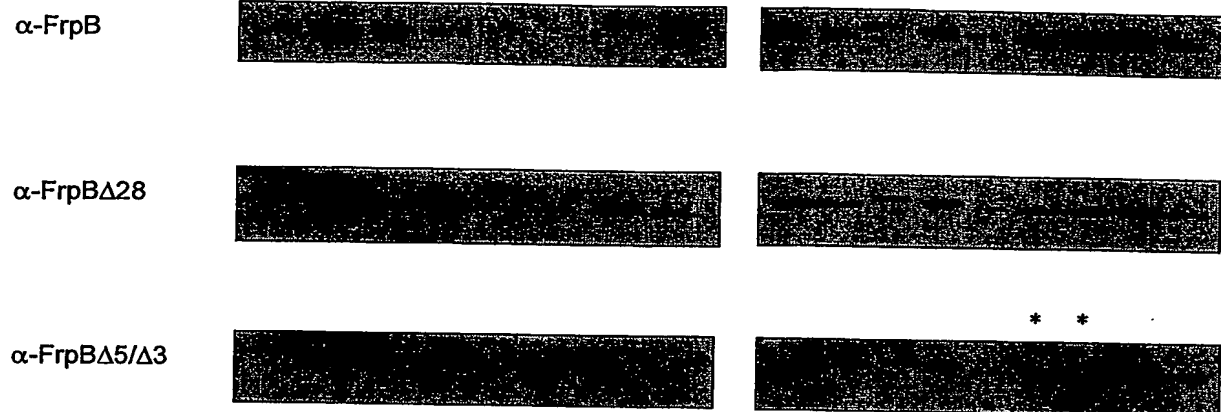
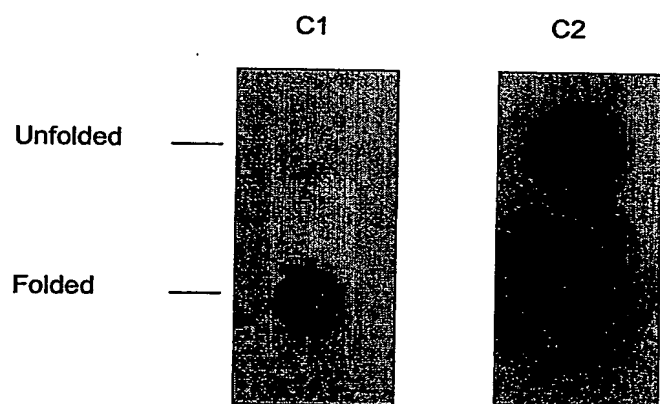


Figure 12



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